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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,774	09/10/2003	Henry Haverinen	944-001.090-1	4877
10/945 7590 01/04/2011 NOKIA CORPORATION c/o Ware, Fressola, Van Der Stuyts & Adolphson LLP Building Five, Bradford Green 755 Main Street, PO Box 224 Monroe, CT 06468				
EXAMINER				
DAILEY, THOMAS J				
ART UNIT		PAPER NUMBER		
2452				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/659,774

## Applicant(s)

HAVERINEN ET AL.

## Examiner

THOMAS J. DAILEY

## Art Unit

2452

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1.4.7.10.13-15.20.21 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1.4.7.10.13-15.20.21 and 24-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1, 4, 7, 10, 13-15, 20-21, and 24-29 are pending.

### ***Response to Arguments***

2. The applicant's arguments with respect to the 35 USC 112 second paragraph rejections directed at claims 1, 4, 7, and 13 have been persuasive and those rejections have been withdrawn.
3. The applicant argues that the rejections under the 35 USC 112 of claims 15, 20, and 21 is improper as they recite an apparatus comprising a processor, and the claims are defined by the functions of the processor, and therefore the apparatus is defined by a processor that performs the functions listed in the claims.
4. The rejections have been withdrawn in view of the arguments, as the applicant has indicated that the actual structure of the apparatus is limited to the processor. However, the examiner reiterates, according to the MPEP 2106(IV)(B), "[n]ote that an apparatus claim with process steps is not classified as a "hybrid" claim; instead, it is simply an apparatus claim including functional limitations." Further, "[w]hile features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function" and "apparatus claims cover what a device is, not what a device does." See MPEP 2114. See also

MPEP 2111.04 ("Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure").

Thus, because the claims are apparatus claims, those functional limitations may simply be ignored because they do not limit the apparatus to a particular structure. That is, since "claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function," what, structurally, in these claims is different than any computer with a processor? Basically, for the claims in question, the applicant has simply claimed a processor and the examiner strongly urges the applicant to recite limiting structure in these apparatus claims.

5. The applicant argues with respect to the independent claims that both O'Neill does not disclose or suggest that the terminal has a reauthentication identity transmitted to it. Further, the applicant contends, the second reference, Westerdal is completely silent regarding reauthentication, and does not disclose a reauthentication identity including a unique realm name identifying an authentication server.
6. The examiner disagrees. First, O'Neill discloses transmitting to the terminal a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of

any end node (terminal) includes a realm name and identifies the home authentication server; it is essential that the realm name is transmitted to the mobile device). That is, O'Neill discloses transmission of a reauthentication identity to a terminal in a broad sense, but, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur. The Westerdal reference was relied upon to disclose transmission in response to a specific request as elaborated on below.

Westerdal discloses transmitting a reauthentication identity to a terminal in response to a full authentication request ([0037], client receives a new APID which identifies the authentication server (see for example, [0036], lines 5-9); further this is a reauthentication identity as it is used in subsequent authentications as described in [0036], i.e. if the cookie contains a known APID has already gone through the processes described in [0037]).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 7, 10, 13-15, 20-21, and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill (US Pub. No. 2003/0176188) in view of Westerdal (US Pub. No. 2002/0133719).

9. As to claim 1, O'Neill discloses a method, comprising:

receiving a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full authentication of that particular mobile device);

transmitting to the terminal a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; it is essential that the realm name is transmitted to the mobile device);

receiving a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name uniquely identifying the authentication server ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a "reauthentication identity") reads upon "a request for

reauthentication" as the end node was previously authorized by its home authentication server, as that server stores its service profile);

wherein the request for reauthentication is routed to the authentication server according to the unique realm name included in the request for reauthentication ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Westerdal discloses transmitting a reauthentication identity to a terminal in response to an authentication request ([0037], client receives a new APID which identifies the authentication server (see for example, [0036], lines 5-9); further this is a reauthentication identity as it is used in subsequent authentications as described in [0036], i.e. if the cookie contains a known APID has already gone through the processes described in [0037])).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Westerdal because the substitution of one known element (i.e. Westerdal's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for network devices, i.e. the end result of both Westerdal and O'Neill) to one of ordinary skill in the art.

10. As to claims 4, 7, 13, 15, and 20, they are rejected by the same rationale set forth in claim 1's rejection.

11. As to claim 10, O'Neill discloses a system comprising:

a first authentication server configured to receive a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (first authentication server) (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full authentication of that particular mobile device), and configured to transmit to the terminal a reauthentication identity including a unique realm name uniquely identifying the first authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; that realm name inherently is transmitted to the mobile device); and

a second authentication server configured to receive a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name identifying the first authentication service ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a "reauthentication identity") to a visited AAA server (second authentication server) reads upon "a request for reauthentication" as the end node was previously



authorized by its home authentication server, as that server stores its service profile), and configured to route the request for reauthentication to the first authentication server according to the unique realm name identifying the first authentication server ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Westerdal discloses transmitting a reauthentication identity to a terminal in response to an authentication request ([0037], client receives a new APID which identifies the authentication server (see for example, [0036], lines 5-9); further this is a reauthentication identity as it is used in subsequent authentications as described in [0036], i.e. if the cookie contains a known APID has already gone through the processes described in [0037])).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Westerdal because the substitution of one known element (i.e. Westerdal's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for network devices, i.e. the end result of both Westerdal and O'Neill) to one of ordinary skill in the art.

12. As to claims 27 and 29, O'Neill discloses a method for use by a terminal, they are rejected by the same rationale set forth in claim 10's rejection
13. As to claim 24, O'Neill discloses wherein the authentication network element is an authentication server (Fig. 5, label 114).
14. As to claim 25, O'Neill discloses wherein the authentication network element is a proxy server (Fig. 5, label 135).
15. As to claim 26, O'Neill discloses wherein the authentication network element is a service access point for authentication by an authentication server (Fig. 5, label 128).
16. Claims 14 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill in view of Westerdal as applied to claims 13 and 20 above, and in view of Barriga-Caceres et al (US Pub No. 2003/0163733), hereafter "Barriga."
17. As to claims 14 and 21, O'Neill and Westerdal do not explicitly disclose wherein the means for transmitting to an authentication network element a request for reauthentication using the reauthentication identity including the unique realm name includes the reauthentication identity in an identity response packet according to an Extensible Authentication Protocol.

However, Barriga discloses an authentication system (Abstract) that utilizes an Extensible Authentication Protocol ([0101]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Westerdal with Barriga in order to utilize a well-known protocol in the art that would allow O'Neill's system to be compatible with other, already deployed, systems.

### ***Conclusion***

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
19. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is

571-270-1246. The examiner can normally be reached on Monday thru Friday;  
9:00am - 5:00pm.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on 571-272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrice L Winder/  
Primary Examiner, Art Unit 2452

/T. J. D./  
Examiner, Art Unit 2452